

**NOMENCLATURAL CHANGES IN THE BRYACEAE
(BRYOPSIDA) FOR NORTH AMERICA II.****John R. Spence**

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ABSTRACT

An additional 25 new combinations in Bryaceae are made for the Bryophyte Flora of North America project in the genera *Gemmabryum*, *Imbribryum*, *Rosulabryum*, and *Ptychostomum*.

KEY WORDS: mosses, North America, Bryaceae, *Gemmabryum*, *Imbribryum*, *Ptychostomum*, *Rosulabryum*.

This paper represents the second installment of taxonomic and nomenclatural changes in the family Bryaceae for the Bryophyte Flora of North America. The first paper (Spence 2005) concentrated on the description of the new genera *Leptostomopsis* (C. Müll. Hal.) Spence & Ramsay and *Plagiobryoides* Spence as well as transfers to the reinstated genera *Haplodontium* Hampe and *Ptychostomum* Hornschuch. Below many additional species are transferred to the newly described genera *Gemmabryum* Spence & Ramsay and *Imbribryum* Pedersen and more transfers are made to *Ptychostomum* and *Rosulabryum* Spence.

***Gemmabryum* J.R. Spence & H.P. Ramsay**

Gemmabryum was described by Spence and Ramsay (2005) for the Flora of Australia, with 25 species transferred. Although many of these also occur in North America, numerous additional species restricted to North America or the Northern Hemisphere exist as well that fit within the concept of *Gemmabryum*. An additional 10 species found in the Bryophyte Flora of North America region are here transferred to the genus.

Gemmabryum barnesii (J.B. Wood ex W.P. Schimper) J.R. Spence,
comb. nov. Basionym: *Bryum barnesii* J.B. Wood ex W.P.
Schimper, Synopsis Muscorum Europaeorum, Ed. Secunda
471. 1876.

Gemmabryum bicolor (Dickson) J.R. Spence, **comb. nov.** Basionym:
Bryum bicolor Dickson, Fasciculus Plantarum
Cryptogamicarum Britanniae 4: 16. 1801.

Gemmabryum californicum (Sullivant) J.R. Spence, **comb. nov.**
Basionym: *Bryum californicum* Sullivant, Exploration and
Surveys for a Railroad Route from the Mississippi River to the
Pacific Ocean, Description of the Mosses and Liverworts 4(5):
188. 6. 1856.

Gemmabryum demaretianum (Arts) J.R. Spence, **comb. nov.**
Basionym: *Bryum demaretianum*
Arts, Journal of Bryology 17: 263. 1992.

Gemmabryum gemmiferum (Wilczek & Demaret) J.R. Spence, **comb.**
nov. Basionym: *Bryum gemmiferum* Wilczek & Demaret,
Bulletin du Jardin Botanique National de Belgique 46:
529. f. 5. 1976.

Gemmabryum gemmilucens (Wilczek & Demaret) J.R. Spence, **comb.**
nov. Basionym: *Bryum gemmilucens* Wilczek & Demaret,
Bulletin du Jardin Botanique National de Belgique 46:
537. f. 9. 1976.

Gemmabryum mexicanum (Montagne) J.R. Spence, **comb. nov.**
Basionym: *Brachymenium mexicanum* Montagne, Annales des
Sciences Naturelles; Botanique, sér. 2, 9: 54. 1838.

Gemmabryum ruderale (Crundwell & Nyholm) J.R. Spence, **comb.**
nov. Basionym: *Bryum ruderale* Crundwell & Nyholm,
Botaniska Notiser 116: 95. 1963.

***Gemmabryum valparaisense* (Thériot) J.R. Spence, comb. nov.**

Basionym: *Bryum valparaisense* Thériot, Revista Chilena de Historia Natural 21: 14. 4 f. 1. 1917.

***Gemmabryum violaceum* (Crundwell & Nyholm) J.R. Spence, comb. nov.**

Basionym: *Bryum violaceum* Crundwell & Nyholm, Botaniska Notiser 116: 94. 1963.

***Imbribryum* N. Pedersen**

This genus was described based on molecular and morphological data by Pedersen and Hedenäs (2005) and Pedersen (2005). It consists primarily of the large imbricate-leaved species in *Bryum* section *Alpiniformia*. Four North American species are transferred.

***Imbribryum gemmiparum* (De Notaris) J.R. Spence, comb. nov.**

Basionym: *Bryum gemmiparum* De Notaris, Commentario della Società Crittogramologica Italiana 2: 212 [112] [Cronaca Briol. Ital. 1: 25]. 1865.

***Imbribryum microchaeton* (Hampe) J.R. Spence, comb. nov.**

Basionym: *Bryum microchaeton* Hampe, Annales des Sciences Naturelles; Botanique, sér. 5, 4: 342. 1865.

***Imbribryum mildeanum* (Juratzka) J.R. Spence, comb. nov. Basionym:**

Bryum mildeanum Juratzka, Verhandlungen der Zoologisch-botanischen Gesellschaft in Wein 12: 967. 1862.

***Imbribryum minutum* (Lesquereux) J.R. Spence, comb. nov.**

Basionym: *Bryum minutum* Lesquereux, Memoirs of the California Academy of Sciences 1: 23. 1868.

Ptychostomum Hornschuch

Continuing fieldwork and examination of collections has documented or confirmed the existence of several additional species in North America. The following 10 species found in North America are transferred to the genus.

Ptychostomum acutiforme (Limprecht) J.R. Spence **comb. nov.**

Basionym: *Bryum acutiforme* Limprecht, Tromsø Museums Aarshefter 21-22: 156. 1901.

Ptychostomum axel-blyttii (H. Philibert) J.R. Spence, **comb. nov.**

Basionym: *Bryum axel-blyttii* H. Philibert, Revue Bryologique 16: 61. 1889.

Ptychostomum archangelicum (Bruch & W.P. Schimper in B.S.G.)

J.R. Spence, **comb. nov.** Basionym: *Bryum archangelicum* Bruch & Schimper in B.S.G., Bryol. Eur. 4: 153, pl. 333. 1846.

Ptychostomum badium (Bridel) J.R. Spence, **comb. nov.** Basionym:

Bryum caespiticium var. *badium* Bridel, Bryol. Univ. 1: 850. 1827.

Ptychostomum bryoides (R. Brown) J.R. Spence **comb. nov.**

Basionym: *Pohlia bryoides* R. Brown, Chloris Melvilliana 38: 1823.

Ptychostomum funkii (Schwägrichen) J.R. Spence **comb. nov.**

Basionym: *Bryum funkii* Schwägrichen, Species Muscorum Frondosorum, Supplementum Primum 2: 89, pl. 69. 1816.

Ptychostomum kunzei (Hornschorch) J.R. Spence **comb. nov.**

Basionym: *Bryum kunzei* Hornschuch, Flora 2(1): 90. 1819.

Ptychostomum nitidulum (Lindberg) J.R. Spence **comb. nov.**

Basionym: *Bryum nitidulum* Lindberg, Öfversigt of Förhandlingar: Kongl. Svenska Vetenskaps-Akademien 23: 545. 1866.

Ptychostomum ovatum (Hedwig) J.R. Spence, **comb. nov.** Basionym:

Gymnostomum ovatum Hedwig, Species Muscorum Frondosorum 31, pl. 2: 1-3. 1801.

Ptychostomum teres (Lindberg) J.R. Spence **comb. nov.** Basionym:
Bryum teres Lindberg, Öfversigt af Förfärlingar: Kongl.
Svenska Vetenskaps-Akademien 23: 545. 1866.

Rosulabryum J.R. Spence

One species is transferred to this genus as there is a need for the name to be made available quickly for other pending studies, including the forthcoming Moss Flora of Colorado. The status and taxonomy of the genus in North America will be analyzed in a separate paper (Spence in prep.).

Rosulabryum flaccidum (Bridel) J.R. Spence, **comb. nov.** Basionym:
Bryum flaccidum Bridel, Bryologia Universa 1: 667. 1826.

ACKNOWLEDGEMENTS

This work was supported in part by a grant from the Flora of North America Association. The Missouri Botanical Gardens provided office space. Thanks are due to Richard Zander, Marshall Crosby and Bruce Allen for their support during my stay. William Weber, Marshall Crosby and Richard Zander kindly reviewed an early draft of this work.

LITERATURE CITED

Pedersen, N. 2005. Validation of *Imbribryum* (Bryaceae). The Bryologist 108: 449.

Pedersen, N. and L. Hedenäs. 2005. Taxonomic and nomenclatural implications of phylogenetic studies of the Bryaceae based on molecular data and morphology. The Bryologist 108: 123-128.

Spence, J.R. 2005. New genera and combinations in Bryaceae (Bryales, Musci) for North America. Phytologia 87: 15-28.

Spence, J.R. and H.P. Ramsay. 2005. New genera and combinations in the Bryaceae (Bryales, Musci) for Australia. Phytologia 87: 61-72.